CONTENTS OF VOLUME 447

February 1992

SIMMONS N.L. Acetylcholine and kinin augmentation of Cl^- secretion stimulated by prostaglandin in a canine renal epithelial cell line. 1

HAK J.B., VAN BEEK J.H.G.M., VAN WIJHE M.H. & WESTERHOF N. Influence of temperature on the response time of mitochondrial oxygen consumption in isolated rabbit heart. 17

MEYER D.J. JR, HUXLEY Virginia H. & MCKAY Mary K. Volume status influences atrial peptide-induced water conductivity changes in leopard frog mesenteric capillaries. 33

TACK J.F. & WOOD J.D. Electrical behaviour of myenteric neurones in the gastric antrum of the guinea-pig. 49

CAMPBELL Jamie D. & PAUL Richard J. The nature of fuel provision for the Na^+, K^+-ATPase in porcine vascular smooth muscle. 67

SPURGEON H.A., DUBELL W.H., STERN M.D., SOLLOTT S.J., ZIMAN B.D., SILVERMAN H.S., CAPOGROSSI M.C., TALO A. & LAKATTA E.G. Cytosolic calcium and myofilaments in single rat cardiac myocytes achieve a dynamic equilibrium during twitch relaxation. 83

SASAKI Tsukasa & GALLACHER David V. The ATP-induced inward current in mouse lacrimal acinar cells is potentiated by isoprenaline and GTP. 103

CRIST Jeffrey R., HE Xue D. & GOYAL Raj K. Both ATP and the peptide VIP are inhibitory neurotransmitters in guinea-pig ileum circular muscle. 119

SANDFORD Christine A., SWEIRY J.H. & JENKINSON D.H. Properties of a cell volume-sensitive potassium conductance in isolated guinea-pig and rat hepatocytes. 133

LEV-TOV A. & PINCO M. *In vitro* studies of prolonged synaptic depression in the neonatal rat spinal cord. 149

KATO M., HOYLAND J., SIKDAR S.K. & MASON W.T. Imaging of intracellular calcium in rat anterior pituitary cells in response to growth hormone releasing factor. 171

NEWLAND Claire F. & CULL-CANDY S.G. On the mechanism of action of picrotoxin on GABA receptor channels in dissociated sympathetic neurones of the rat. 191

DOSSI Roberto Curró, NUÑEZ Angel & STERIADE Mircea Electrophysiology of a slow (0·5–4 Hz) intrinsic oscillation of cat thalamocortical neurones *in vivo*. 215

HEIDELBERGER Ruth & MATTHEWS Gary Calcium influx and calcium current in single synaptic terminals of goldfish retinal bipolar neurons. 235

HUANG Guo-Jie & MCARDLE Joseph J. Novel suppression of an L-type calcium channel in neurones of murine dorsal root ganglia by 2,3-butanedione monoxime. 257

TERZIC André, PUCÉAT Michel, CLÉMENT Odile, SCAMPS Frédérique & VASSORT Guy α_1-Adrenergic effects on intracellular pH and calcium and on myofilaments in single rat cardiac cells. 275

MORITA K. & KATAYAMA Y. Substance P inhibits activation of calcium-dependent potassium conductances in guinea-pig myenteric neurones. 293

UENO Shinya, NAKAYE Toshio & AKAIKE Norio Proton-induced sodium current in freshly dissociated hypothalamic neurones of the rat. 309

BOYLE J.P., TOMASIC M. & KOTLIKOFF M.I. Delayed rectifier potassium channels in canine and porcine airway smooth muscle cells. 329

OZAKI H., BLONDFIELD D.P., HORI M., SANDERS K.M. & PUBLICOVER N.G. Cyclic AMP-mediated regulation of excitation–contraction coupling in canine gastric smooth muscle. 351

TRULSSON Mats, JOHANSSON Roland S. & OLSSON Kurt Å. Directional sensitivity of human periodontal mechanoreceptive afferents to forces applied to the teeth. 373

TATEBAYASHI Hideharu & OGATA Nobukuni Kinetic analysis of the $GABA_B$-mediated inhibition of the high-threshold Ca^{2+} current in cultured rat sensory neurones. 391

CEVESE A., MARY D.A.S.G., POLTRONIERI R., SCHENA F. & VACCA G. Haemodynamic effect of distension of the descending colon in anaesthetized dogs. 409

BERSHITSKY Sergey Y. & TSATURYAN Andrey K. Tension responses to joule temperature jump in skinned rabbit muscle fibres. 425

IGGO A., GREGORY J.E. & PROSKE U. The central projection of electrosensory information in the platypus. 449

SANDS Steven B. & BARISH Michael E. Neuronal nicotinic acetylcholine receptor currents in phaeochromocytoma (PC12) cells: dual mechanisms of rectification. 467

JONES C.T. & EDWARDS A.V. The role of corticotrophin releasing factor in relation to the neural control of adrenal function in conscious calves. 489

NZEGWU Helen C. & LEVIN R.J. Dietary restriction sensitizes the rat distal colon to aldosterone. 501

MARKRAM Henry & SEGAL Menahem The inositol 1,4,5-trisphosphate pathway mediates cholinergic potentiation of rat hippocampal neuronal responses to NMDA. 513

MAERTENS DE NOORDHOUT A., ROTHWELL J.C., DAY B.L., DRESSLER D., NAKASHIMA K., THOMPSON P.D. & MARSDEN C.D. Effect of digital nerve stimuli on responses to electrical or magnetic stimulation of the human brain. 535

MCMAHON Sarah E. & MCWILLIAM Peter N. Changes in R–R interval at the start of muscle contraction in the decerebrate cat. 549

DOEMGES F. & RACK P.M.H. Changes in the stretch reflex of the human first dorsal interosseous muscle during different tasks. 563

DOEMGES F. & RACK P.M.H. Task-dependent changes in the response of human wrist joints to mechanical disturbance. 575

SMART Trevor G. A novel modulatory binding site for zinc on the $GABA_A$ receptor complex in cultured rat neurones. 587

IKEDA Katsuhisa, SAITO Yoshitaka, NISHIYAMA Akinori & TAKASAKA Tomonori Intracellular pH regulation in isolated cochlear outer hair cells of the guinea-pig. 627

WEISS James N., VENKATESH Nagammal & LAMP Scott T. ATP-sensitive K^+ channels and cellular K^+ loss in hypoxic and ischaemic mammalian ventricle. 649

STUART G.J. & REDMAN S.J. The role of $GABA_A$ and $GABA_B$ receptors in presynaptic inhibition of Ia EPSPs in cat spinal motoneurones. 675

SCHWIENING Christof J. & THOMAS Roger C. Mechanisms of pH_i regulation by locust neurones in isolated ganglia: a microelectrode study. 693

IKEDA Masahiro, KUROKAWA Kiyoshi & MARUYAMA Yoshio Cyclic nucleotide-dependent regulation of agonist-induced calcium increases in mouse megakaryocytes. 711

PAPE Hans-Christian Adenosine promotes burst activity in guinea-pig geniculocortical neurones through two different ionic mechanisms. 729

FLAMENT D., HALL E.J. & LEMON R.N. The development of cortico-motoneuronal projections investigated using magnetic brain stimulation in the infant macaque. 755